

REMARKS

This is a full and timely response to the outstanding Action mailed September 21, 2005. The Examiner is thanked for the thorough examination of this application. The Office Action, however, has tentatively rejected all claims 1-13. Claims 1 and 8 have been amended, and all claims 1-13 remain pending.

Support for the claims amendments can be found in the originally filed application. For example, the feature of "the ribs have identical widths and partition off the second substrate into a plurality of first, second and third sub-pixels adjacent to each other" can be found at least in FIGS. 3A, 4, 5, and 6, and the related discussion. Likewise, the feature "every first(second/third) address electrode is in the center of the first(second/third) sub-pixels" can be found, for example, on page 7, lines 3-30, page 8-9, page 10, lines 1-10 and FIGS. 3B-3E. Accordingly, the amendments add no new matter to the application

Rejections Under 35 U.S.C. 102(b) of Claims 1-3, 8, and 9

Claims 1-3, 8 and 9 were tentatively rejected under 35 U.S.C. 102(b) as allegedly unpatentable over Kim et al. (US published application 2002/0175623, hereinafter "Kim"). Claims 1 and 8 are independent claims, from which claims 2-7 and 9-13 depend. Applicant submits that claims 1 and 8 are patentable for at least the reasons discussed below, and therefore for at least the same reasons claims 2-7 and 9-13 are patentable.

In rejecting claim 1, the Office Action alleges that:

... Kim et al discloses a plasma display panel, comprising: a first substrate (paragraph 5); a second substrate (paragraph 5); a rib structure disposed on the second substrate to space the second substrate from the first substrate, wherein the rib structure partitions off the second substrate into a plurality of first, second and third sub-pixels adjacent to each other, and both the first and second sub-pixels are smaller than the third sub-pixels (paragraph 12); red phosphor disposed on each first sub-pixel; green phosphor disposed on each second sub-pixel; and blue phosphor disposed on each third sub-pixel(paragraph 25);

wherein adjacent first, second and third sub-pixels form a pixel and all of the pixels between the first and second substrates are filled with neon gas (paragraph 5).

(Office Action, p. 2).

In rejecting claim 8, the Office Action alleges that:

Kim et al discloses a plasma display panel, comprising: a first substrate(paragraph 5); a second substrate(paragraph 5); a rib structure disposed on the second substrate to space the second substrate from the first substrate, wherein the rib structure partitions off the second substrate into a plurality of first, second and third sub-pixels adjacent to each other, and both of the first and second sub-pixels are smaller than the third sub-pixels(paragraph 12); red phosphor disposed on each first sub-pixel; green phosphors disposed on each second sub-pixel; blue phosphors disposed on each third sub-pixel(paragraph 25), wherein adjacent first, second and third sub-pixels form a pixel and all of the sub-pixels between the first and second substrates are filled with Neon(paragraph 5); a plurality of first address electrodes disposed on the second substrate and on the center of first sub-pixels; a plurality of first address electrodes disposed on the second substrate and in the center of the first sub-pixels; a plurality of second address electrodes disposed on the second substrate and in the center of the second sub-pixels; and a plurality of third address electrodes disposed on the second substrate and in the center of the third sub-pixels.(fig.2 and 26 of fig.3)

(Office Action, p. 3).

Applicant respectfully disagrees. With regard to independent claim 1, claim 1 (as amended) recites:

1. A plasma display panel, comprising:
 a first substrate;
 a second substrate;
 ribs disposed on the second substrate to space the second substrate from the first substrate, wherein the **ribs have identical widths and partition off the second substrate into a plurality of first, second and third sub-pixels adjacent to each other**, and both the first and second sub-pixels are smaller than the third sub-pixels;
 red phosphor disposed on each first sub-pixel;
 green phosphor disposed on each second sub-pixel; and
 blue phosphor disposed on each third sub-pixel;
 wherein adjacent first, second and third sub-pixels form a pixel and all of the pixels between the first and second substrates are filled with neon gas.

(Emphasis Added)

As specifically recited in claim 1, the plasma display panel comprises "... **ribs with identical widths.**" In contrast, Kim discloses (in column 2, lines 1-7 and FIG 2): "FIG2 shows the structure of the partition walls 30. Referring to the drawings, **the auxiliary partition walls 32, 33 and 34 have different**

width, T1, T2 and T3, respectively. Thus, the area of the discharge cells are made different by auxiliary partition walls 32,33 and 34, in accordance with the efficiency of radiation fluorescent substance in each of the discharge cells.”

For at least this reason, the plasma display panel defined in claim 1 is clearly different from the plasma display panel in Kim, as the auxiliary partition walls 32, 33 and 34 of Kim have different widths. For at least this reason, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Hence it is respectfully submitted that amended claim 1 is allowable over the cited reference (Kim et al). Insofar as claims 2 and 7 depend from amended claim 1, these claims are also allowable at least by virtue of their dependency.

With regard to independent claim 8, this claim (as amended) recites:

8. A plasma display panel, comprising:
a first substrate;
a second substrate;
a rib structure disposed on the second substrate to space the second substrate from the first substrate, wherein the rib structure partitions off the second substrate into a plurality of first, second and third sub-pixels adjacent to each other, and both of the first and second sub-pixels are smaller than the third sub-pixels;
red phosphor disposed on each first sub-pixel;
green phosphors disposed on each second sub-pixel;
blue phosphors disposed on each third sub-pixel, wherein adjacent first, second and third sub-pixels form a pixel and all of the sub-pixels between the first and second substrates are filled with Neon;
a plurality of first address electrodes disposed on the second substrate, wherein every first address electrode is in the center of the first sub-pixels;
a plurality of second address electrodes disposed on the second substrate, wherein every second address electrode is in the center of the second sub-pixels; and
a plurality of third address electrodes disposed on the second substrate, wherein every third address electrode is in the center of the third sub-pixels.

(Emphasis Added).

As expressly recited in claim 8, the plasma display panel comprises a plurality of first (second/third) address electrodes disposed on the second substrate. Moreover, every first (second/third) address electrode

“is in the center of the first (second/third) sub-pixels.” In contrast, as disclosed by Kim in FIG 3, the address electrode 26 on the blue discharge cell (SB) is not in the center of the sub-pixels. Only the address electrode 26 on red discharge cell (SR) and green discharge cell (SG) are in the center of the sub-pixels. For at least this reason, in Kim, not every address electrode 26 is on the center of the sub-pixels (discharge cell).

For at least this reason, it is clear that the plasma display panel in claim 8 is patently different from the plasma display panel in Kim, as not every address electrode 26 of Kim is on the center of the sub-pixels (discharge cell). For at least this reason, reconsideration of this rejection is hereby respectfully requested. As claims 9-13 each depend from claim 8, the rejections of these claims should be withdrawn for at least the same reason.

Rejections Under 35 U.S.C. 103(a) of Claims 4-7 and 10-13

In addition to the distinctions set forth above, Applicant respectfully traverses the rejections of claims 4-7 and 10-13 for the following additional reasons. The Office Action rejected these claims under 35 U.S.C. § 103(a) as allegedly unpatentable over the combination of Kim in view of U.S. published application 2004/0113553 to Yoon. However, Applicant respectfully submits that the Office Action has failed to cite a proper motivation or suggestion for combining these cited references. In this regard, the Office Action stated only that the combination would have been obvious “in order to provide for a delta configuration” (in rejecting claims 4, 5, 10, 11, and 13) or “in order to allow for more tessellate arrangement of cells” (in rejecting claims 6, 7, and 12). Office Action, pp. 6-8. These alleged motivations are clearly improper in view of well-established Federal Circuit precedent.

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc., 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

"The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ..." Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention."

(*Emphasis added.*) In re Dow Chemical Company, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicant notes that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. Stiftung v. Renishaw PLC, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to derive a plasma display panel, as claimed by the Applicant.

When an obviousness determination is based on multiple prior art references, there must be a showing of some "teaching, suggestion, or reason" to combine the references. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997) (also noting that the "absence of such a suggestion to combine is dispositive in an obviousness determination").

Evidence of a suggestion, teaching, or motivation to combine prior art references may flow, inter alia, from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. See In re Dembiczak, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be “clear and particular.” Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617.

If there was no motivation or suggestion to combine selective teachings from multiple prior art references, one of ordinary skill in the art would not have viewed the present invention as obvious. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); Gambro Lundia AB, 110 F.3d at 1579, 42 USPQ2d at 1383 (“The absence of such a suggestion to combine is dispositive in an obviousness determination.”).

Significantly, where there is no apparent disadvantage present in a particular prior art reference, then generally there can be no motivation to combine the teaching of another reference with the particular prior art reference. Winner Int’l Royalty Corp. v. Wang, No 98-1553 (Fed. Cir. January 27, 2000).

Merely identifying some benefit (from hindsight) that results from a combination is not sufficient to justify the combination, and the motivation or suggestion must come from the prior art itself, and the Office Action has failed to identify such proper motivations. As noted above, the Office Action stated that the motivation would be either “in order to provide for a delta configuration” or “in order to allow for a more tessellate arrangement of cells.” Further, there must be a proper teaching or suggestion (within the prior art itself) for the particular features

being combined. This suggestion must be something more than simply a utilitarian benefit that is observed from hindsight.

For at least this additional reason that the Office Action failed to identify proper motivations or suggestions for combining the various references to properly support the rejections under 35 U.S.C. § 103, the rejection of claims 4-7 and 10-13 should be withdrawn.

CONCLUSION

For at least the reasons described above, all claims are now in condition for allowance.

Should Examiner feel that further discussion of the application and the Amendment is conducive to prosecution and allowance thereof, please do not hesitate to contact the undersigned at the address and telephone listed below.

No fee is believed to be due in connection with this Amendment and Response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

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